

International application No.

PCT/JP03/08328

### A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> D02G1/04

**According to International Patent Classification (IPC) or to both national classification and IPC**

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> D02G, D02J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPIL

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim-No.
Y	JP 51-53148 A (Hokushin Chemical Industries Co., Ltd.), 11 May, 1976 (11.05.76), Drawings (Family: none)	1-10
Y	JP 59-10136 Y2 (Toray Industries, Inc.), 30 March, 1984 (30.03.84), Figs. 1, 2 (Family: none)	1-10
Y	US 4218930 A (NTN Tokyo Bearing Co., Ltd.), 26 August, 1980 (26.08.80), Fig. 9(e) & JP 54-6945 A                      & JP 54-42438 A	1-10

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

**"E"** earlier document but published on or after the international filing date

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**"X"** document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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**"&"** document member of the same patent family

Date of the actual completion of the international search  
01 September, 2003 (01.09.03)

Date of mailing of the international search report  
16 September, 2003 (16.09.03)

Name and mailing address of the ISA/  
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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/08328

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3272027 A (Link Belt Co.), 13 September, 1966 (13.09.66), Fig. 3 (Family: none)	1-10
Y	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 931/1976 (Laid-open No. 93750/1977) (NTN Toyo Bearing Co., Ltd.), 13 July, 1977 (13.07.77), Fig. 2 (Family: none)	1-10
A	JP 6-184849 A (Yamauchi Kabushiki Kaisha), 05 July, 1994 (05.07.94), All references (Family: none)	1-10

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